

Protect your Watershed from Zebra Mussels, Become a Volunteer Monitor

By Tanya Veldhuizen and Cindy Messer
California Department of Water Resources, Sacramento, CA
mussel@water.ca.gov

We know it is just a matter of time before zebra mussels become established in California. Overland transport of recreational watercraft is the primary vector of zebra mussels. When the agricultural inspection stations began inspecting trailered boats entering California in October 1993, inspectors found zebra mussels on a boat within six weeks. Zebra mussels have been found on 24 boats between 1993 and April 2000. We feel this is a very high number considering that the inspections are not mandatory and the inspection stations are not open at all times. To make matters worse, currently 6 out of the 11 stations are closed because of California's budget crisis. The operating hours of the remaining 5 stations have been severely reduced and boat inspections are no longer being conducted. With this line of defense gone, we need to increase our public awareness efforts and become vigilant about monitoring for zebra mussels.

Why Monitor for Zebra Mussels?

Early Detection

The objective of field monitoring is to detect zebra mussels during the initial stage of establishment. In order to eradicate zebra mussels from a waterbody, we must implement control measures when the population is small and isolated. Early detection is the key to successful eradication. A rapid response plan will be in place and will contain guidelines and instructions for responding to a zebra mussel invasion.

Prevent Spread

Our ability to successfully eradicate or control an infestation of zebra mussels is more feasible and less costly if the population is isolated to a single lake as opposed to widespread in the watershed. Therefore, containing new zebra mussel populations is extremely important. In the event zebra mussels are discovered in a lake, the California Department of Fish and Game, along with other state and federal agencies, will take steps to prevent the mussel from spreading to other lakes and rivers. These steps may include boat cleaning at the infested lake, increasing public education and awareness efforts, and modifying the use of the infested lake.

Time to Prepare

Early detection provides water facility managers with an early warning system. They have some time to retrofit their facility to ensure uninterrupted water deliveries. Facility managers will need to change facility operating procedures to adapt to and minimize the impacts of zebra mussels. Such measures may include retrofitting intake valves with customized filters designed to screen out mussels, painting irritant coatings on surfaces to prevent mussels from settling, periodically flushing the system with high concentrations of chemicals (such as chlorine) or hot water to kill attached mussels, or periodically pressure washing all surfaces with hot water to kill and remove attached mussels. All of these

measures are very costly and may require temporary facility shutdowns.

What You Can Do To Help

- Volunteer to monitor your lake, reservoir, or river. The time commitment is minimal (about 30 minutes per month), and the Zebra Mussel Watch program supplies the equipment.
- Inform others about how to prevent the spread of zebra mussels.
- Look for zebra mussels in your lake or reservoir by inspecting objects left in the water for long periods of time (e.g. boats, logs, aquatic vegetation, boat docks/ramps, bouys).
- Inspect out-of-state boats and trailers for the presence of zebra mussels.
- Clean and inspect your boat regularly and inform others to do the same.

How To Report Sightings

If you find zebra mussels, collect several specimens and record the precise location (e.g., waterbody, nearest landmark, GPS coordinates, etc), date, and contact information. Preserve the specimens in ethanol, rubbing alcohol, freezer, or allow to air dry. Immediately notify Zebra Mussel Watch staff by phone (1-888-840-8917) or email (mussel@water.ca.gov) for further instructions.

To Learn More

More information about zebra mussels and other introduced aquatic animals and plants can be found at the following websites:

www.100thmeridian.org (The 100th Meridian Initiative)
www.nsgo.seagrant.org (National Sea Grant Program)

or by contacting:

Zebra Mussel Watch Program

Phone: 1-888-840-8917 (toll free)

Fax: (916) 227-7554

Email: mussel@water.ca.gov